

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1. (Currently Amended) A system for transferring proprietary information through a communications pipe established between at least a first remote computer system and at least a PSD personal security device using a local client as a communications host for said personal security device PSD, said system comprising:

at least one network, wherein said network includes means for functionally connecting at least one local client with said at least one first remote computer system;

said local client further comprising means for functionally connecting to a personal security device Interface and said network, means for functionally communicating over said network with said remote computer system and means for establishing a communications pipe, said means for establishing a communications pipe comprising:

client communications means for transmitting and receiving message packets over said network using a packet based communications protocol, and for transmitting and

receiving APDUs through said personal security device  
Interface;

first client data processing means for receiving  
incoming message packets from said remote computer system  
using said client communications means, separating  
encapsulated APDUs from said incoming message packets thus  
generating desencapsulated APDUs and routing said  
desencapsulated APDUs to said personal security device  
through said personal security device Interface  
independently of the origin and integrity of said incoming  
message packets; and

second client data processing means for receiving  
incoming APDUs from said personal security device interface,  
encapsulating said incoming APDUs into outgoing message  
packets and routing said outgoing message packets to said  
remote computer system through said client communications  
means;

~~said at least one local client further comprising means for~~  
~~transferring incoming data and applications sent from a first~~  
~~remote computer system through said pipe to said PSD and wherein~~  
~~said local client is functionally connected to said PSD and said~~  
~~network and is functionally communicating through said pipe with~~  
~~said remote computer system and said PSD;~~

said at least one personal security device PSD further comprising at least one embedded personal security device PSD application, a microprocessor, a runtime environment and at least one internal memory location, wherein said embedded application receives proprietary information through said established communications pipe and stores said information in said internal memory location and wherein said personal security device PSD is functionally connected to said client and is functionally communicating with said client and said first remote computer system through said established communications pipe; and

said at least one first remote computer system further comprising means for transferring said proprietary information from a storage location through said established communications pipe, wherein said first remote computer system is functionally connected to said network and is functionally communicating with said client and said personal security device PSD through said established communications pipe.

2. (Currently Amended) The system according to claim 1, further comprising cryptography means for decrypting encrypted said incoming proprietary information and encrypting outgoing responses communicated through said established communications pipe.

3. (Original) The system according to claim 1, wherein said memory location is an open location.

4. (Original) The system according to claim 1, wherein said memory location is a secure location.

5. (Currently Amended) The system according to claim 1, further comprising receiving, processing and routing means for transferring said proprietary information received over said network from at least one subsequent remote computer system through said established communications pipe to said personal security device PSD.

6. (Original) The system according to claim 1, wherein said storage location is local to said first remote computer system.

7. (Original) The system according to claim 1, wherein said storage location is local to at least one subsequent remote computer system.

8. (Original) The system according to claim 1, further comprising means for functionally connecting said first remote

computer system with at least one subsequent remote computer system.

9. (Original) The system according to claim 8, wherein said subsequent remote computer system is functionally connected to said network and is functionally communicating with said first remote computer system using said network.

10. (Currently Amended) The system according to claim 1, wherein said established communications pipe employs an open communications protocol.

11. (Currently Amended) The system according to claim 1, wherein said established communications pipe employs a secure communications protocol.

12. (Currently Amended) A method for transferring proprietary information through a communications pipe between at least a first remote computer system and at least a personal security device PSD using a local client as a communications host for said personal security device PSD, said method comprising:  
establishing a communications pipe between said personal security device PSD and said first remote computer system over at

least one network and using said client as a communications host for said personal security device PSD, wherein said client and said remote computer system are in functional communication using a packet based communications protocol over said network, and wherein transmitting a message from said remote computer system to said personal security device through said communications pipe comprises:

generating a message on said remote computer system,  
wherein said message is in a non-native protocol for  
communicating with said personal security device and said  
message is generated by an API Level Program,  
converting on said remote computer system said message  
from said non-native protocol into an APDU format message  
using a first server data processing means,  
encapsulating on said remote computer system said APDU  
format message into said packet based communications  
protocol producing an encapsulated message, using a second  
server data processing means,  
transmitting said encapsulated message over said  
network using said packet based communications protocol,  
receiving by said client said encapsulated message sent  
over said network, processing said encapsulated message

using a first data processing means to separate said APDU  
format message from said encapsulated message, and  
routing on said client said APDU format message through  
a hardware device port assigned to a personal security  
device Interface, independently of the origin and integrity  
of said encapsulated message, wherein said personal security  
device Interface is in processing communication with said  
personal security device;  
retrieving said proprietary information from a storage  
location by said first remote computer system,  
processing said proprietary information by said first remote  
computer system,  
transmitting as a message said proprietary information  
through said established communications pipe to said personal  
security device PSD,  
receiving said proprietary information through said  
established communications pipe from said first remote computer  
system by said personal security device PSD, and  
storing said proprietary information in a memory location  
inside said personal security device PSD, using at least one  
embedded internal algorithm.

13. (Original) The method according to claim 12, further comprising retrieving said proprietary information from a local storage location.

14. (Original) The method according to claim 12, further comprising retrieving said proprietary information from a remote storage location.

15. (Original) The method according to claim 12, further comprising establishing said communications pipe using an open communications protocol.

16. (Original) The method according to claim 12, further comprising establishing said communications pipe using a secure communications protocol.

17. (Currently Amended) A method for transferring proprietary information through a communications pipe between at least a first remote computer system and at least a personal security device PSD using a local client as a communications host for said personal security device PSD, said method comprising:  
establishing a communications pipe between said personal security device PSD and said first remote computer system over at

least one first network and using said client as a communications host for said personal security device PSD, wherein said client and said remote computer system are in functional communication using a packet based communications protocol over said network, and wherein transmitting a message from said remote computer system to said personal security device through said established communications pipe comprises:

generating a message on said remote computer system, wherein said message is in a non-native protocol for communicating with said personal security device and said message is generated by an API Level Program,  
converting on said remote computer system said message from said non-native protocol into an APDU format message using a first server data processing means,  
encapsulating on said remote computer system said APDU format message into said packet based communications protocol producing an encapsulated message, using a second server data processing means,  
transmitting said encapsulated message over said network using said packet based communications protocol,  
receiving by said client said encapsulated message sent over said network, processing said encapsulated message

using a first data processing means to separate said APDU  
format message from said encapsulated message, and  
routing on said client said APDU format message through  
a hardware device port assigned to a personal security  
device Interface independently of the origin and integrity  
of said encapsulated message, wherein said personal security  
device Interface is in processing communication with said  
personal security device;

establishing communications between said first remote computer system and a subsequent remote computer system over at least one second network,

transmitting said proprietary information over said at least one second network by said at least one subsequent remote computer system,

receiving said proprietary information sent over said at least one second network by said at least one subsequent remote computer system,

processing said proprietary information by said first remote computer system,

transmitting as a message said proprietary information through said established communications pipe to said personal security device PSD,

receiving said proprietary information through said  
established communications pipe from said first remote computer  
system by said personal security device PSD, and

storing said proprietary information in a memory location  
inside said personal security device PSD, using at least one  
embedded internal algorithm.

18. (Original) The method according to claim 17, further  
comprising establishing said communications pipe using an open  
communications protocol.

19. (Original) The method according to claim 17, further  
comprising establishing said communications pipe using a secure  
communications protocol.

20. (Original) The method according to claim 17, further  
comprising establishing said communications using an open  
communications protocol.

21. (Original) The method according to claim 17, further  
comprising establishing said communications using a secure  
communications protocol.

22. (Currently Amended) The method according to claim 12 or claim 17, further comprising;

encrypting said proprietary information by said first remote computer system prior to transmitting said proprietary information through said established communications pipe, and

decrypting said encrypted proprietary information after receiving said proprietary information through said established communications pipe by said personal security device PSD.

23. (Original) The method according to claim 22 further comprising;

encrypting said proprietary information by said subsequent remote computer system prior to transmitting said proprietary information over said communications network, and

decrypting said encrypted proprietary information after receiving said proprietary information over said network by said first remote computer system.